

INDIANA MICHIGAN POWER COMPANY,  
D/B/A AMERICAN ELECTRIC POWER,

INFORMAL COMMENTS REGARDING THE  
IURC ELECTRICITY DIVISION STAFF'S  
INDIANA NET METERING PROPOSED RULE, DRAFT 1

# Indiana Net Metering Proposed Rule Draft 1

**June 13, 2003**

## Rule X. Net Metering

### 170 IAC X-1 Definitions

Sec. 1. (a) As used in this rule, "commission" means the Indiana utility regulatory commission.

(b) -As used in this rule, "customer" means any person, firm, corporation, municipality or other government agency which has agreed, orally or otherwise, to pay for electric service received from a public or municipally owned utility.

(c) As used in this rule, "electric utility" means a public utility or municipally owned utility that owns, operates, or manages an electric plant.

(d) As used in this rule, "eligible net metering customer" means a customer that owns and operates a solar, wind, or hydro electrical generating facility that:

- (1) has a nameplate capacity less than or equal to 10 kilowatts (kW);
- (2) is located on the eligible net metering customer's premises; and
- (3) is used primarily to offset all or part of the eligible net metering customer's own electricity requirements.

(e) As used in this rule, "interconnection" or "interconnected" means the physical, parallel connection of a net metering facility with a distribution facility of an electric utility.

(f) As used in this rule, "name plate capacity," means the full-load continuous rating of a generator under specified conditions as designated by the manufacturer.

(g) As used in this rule, "net metering," means measurement of the difference between the electricity that is supplied by the electric utility to an eligible net metering customer and the electricity that is supplied back to the utility by an eligible net metering customer.

(h) As used in this rule "net metering facility" means an arrangement of equipment for the production of electricity from the movement of water or wind, or by photoelectric transformation, which is owned and operated by an eligible net metering customer.

(i) As used in this rule, "parallel" means the designed operation of the net metering facility, interconnection equipment, and electric utility's system where the instantaneous flow of electrical energy may automatically occur in either direction across the interconnection point between the net metering facility and the electrical utility's distribution system.

(j) As used in this rule, "system emergency" means a condition on a utility's system reasonably likely to result in any of the following:

- (1) A significant disruption of service to a customer;
- (2) A substantial deviation from a normal service standard; or
- (3) An endangerment to life or property.

### 170 IAC X-2 Applicability

Sec. 2. These rules shall apply to any electric utility, subject to the jurisdiction of the commission, which may now or hereafter be engaged in the production, transmission, sale or distribution of electric service and all net metering facilities as defined in 170 IAC X-1 that are interconnected with such utilities.

### 170 IAC X-3 Exemption

Sec. 3. Net metering facilities shall be exempt from revenue requirement and associated regulation under IC 8-1-2 as administered by the commission, but the commission shall be final authority over rates for purchase and sale of electric energy and capacity in transactions between net metering facilities and electric utilities.

### 170 IAC X-4 Availability

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Sec 4. (a) An electric utility shall ~~offer~~ make net metering available to, at a minimum, residential customers and elementary, middle, and high schools that install a net metering facility. The utility may limit the aggregate amount of net metering facility nameplate capacity under the net metering tariff to 0.1% of the most recent summer peak load of the utility.

### 170 IAC X-5 Interconnection

Sec 5. (a) A net metering standard interconnection agreement between the electric utility and the eligible net metering customer must be executed before the net metering facility may be interconnected with the electric utility's system.

(b) The net metering facility shall have Underwriters Laboratories certification that it has satisfied the testing requirements of ~~the May 7, 1999~~ UL 1741, ~~Standard for Safety for Static Inverters and Charge Controllers for Use in Photovoltaic Power Systems, and future revisions. dated May 7, 1999.~~ [Note: UL 1741 covers only inverter technologies, specifically inverters to be used in photovoltaic systems. Proposed Rule 170 IAC X-5(b), as drafted, would effectively eliminate the use of synchronous generators and induction generators, which do not use inverters, for net metering. Also, only photovoltaic systems could technically meet this standard and, as a result, hydro and wind turbines units would also be effectively eliminated from net metering. UL 1741 is in the process of being expanded and revised to be compatible with the new IEEE 1547 standard and will, when revised, be in harmony and cover all DG technologies, i.e. synchronous, induction, and inverter.]

(c) The eligible net metering customer shall provide the electric utility proof of qualified installation of the net metering facility ~~and perform tests as specified in IEEE standard 1547.~~ Certification by a licensed electrician shall constitute acceptable proof. ~~The electric utility may perform reasonable on-site inspections to verify the proper installation and continuing safe operation of the net metering customer's facility and, at the customer's request and expense, the commissioning tests specified in IEEE 1547. [Note: The electric utility is ultimately responsible for the safety of its employees and reliable operation of the electric system; continuing inspection rights must be preserved.]~~

(d) An electric utility shall not require an eligible net metering customer, whose net metering facility meets the standards of this subsection, to do any of the following:

- (1) Install additional controls; or
- (2) Perform or pay for additional tests.

(e) The eligible net metering customer shall install, operate, and maintain the net metering facility in accordance with manufacturer's suggested practices for safe, efficient, and reliable operation in parallel to the electric utility's system ~~and in compliance with the electric utility's interconnection guidelines and any other applicable law, regulation, or code.~~

(f) The electric utility may isolate any net metering facility at its own discretion if the electric utility believes continued interconnection with the net metering facility creates or contributes to a system emergency. System emergencies causing discontinuance of interconnection shall be subject to verification by the commission, at the commission's discretion.

## 170 IAC X-6 Metering

Sec 6. (a) One of the following metering options, if not already present, shall be installed on the eligible net metering customer's premises by the utility **at the customer's expense** to properly record the ~~net~~ kilowatt hours of a net metering facility:

- (1) One main watt-hour meter capable of measuring ~~net~~ kilowatt hours (kWh) **in each direction**, or
  - (2) One main watt-hour meter measuring kWh to the eligible net metering customer, and a second watt-hour meter measuring kilowatt hours (kWh) to the electric utility. The reading of the second meter will be subtracted from the reading of the main meter to obtain net kilowatt hours (kWh) for billing.
- (b) An electric utility shall not charge the eligible net metering customer any costs or fees

for:

- (1) Additional metering for single-phase configurations installed at the request of the utility; **or**
- ~~(2) Eligible net metering customer's request to participate in net metering program; or~~
- ~~(3) Initial net metering facility inspections performed at the electric utility's option.~~
- (c) An electric utility may specify in its tariff a nominal charge of no more than \$100 to process an eligible net metering customer's request to participate in net metering program. [Note: AEP recommends charging net metering customer's a modest application fee (e.g. \$100) to cover the costs of prudent and necessary work a utility must perform when it receives an application. Such fees are but a small fraction of the cost of a customer's generation system and should not be considered a disincentive to customers considering the installation of an eligible generation facility. A nominal fee will serve to discourage frivolous applications.]

## 170 IAC X-7 Billing

Sec 7. (a) An electric utility shall determine an eligible net metering customer's monthly bill as follows:

- (1) Bill charges, credits, rates and adjustments shall be in accordance with the utility's tariff and administrative rules that would apply if the eligible net metering customer did not participate in net metering. **Such charges shall be based upon the energy flow into the customer's delivery point for the billing month.**
- (2) ~~The utility shall measure the difference between the amount of electricity delivered by the utility to the eligible net metering customer and the amount of electricity generated by the eligible net metering customer and delivered to the utility during the billing period, in accordance with normal metering practices. If the kilowatt hours (kWh) delivered by the utility to the eligible net metering customer exceeds the kilowatt hours (kWh) delivered by the eligible net metering customer to the utility during the billing period, the eligible net metering customer shall be billed for the kilowatt hours (kWh) difference at the rate applicable to the eligible net metering customer if it was not an eligible net metering customer. If the kWh generated by the eligible net metering customer and delivered to the utility exceeds the kWh supplied by the utility to the eligible net metering customer during the billing period, the eligible net metering customer shall be receive an energy credited each month in the next billing cycle for the kWh that flow out of the customer's delivery point difference multiplied by the generation component of the tariff that would apply if the eligible net metering customer did not participate in net metering. In no event shall the customer's net bill in any month be less than the customer service charge under the applicable tariff. No energy credit shall carry forward to the next billing month. [Note: Crediting the customer for the generation component of the applicable tariffed rate recognizes that the customer supplies generation while continuing to utilize the transmission and distribution facilities of the utility. Crediting the customer at full bundled rate overcompensates the net metering customer, undercompensates the utility and its shareholders, and creates a subsidy for the net metering customer to ultimately be paid by the utility's other nonparticipating customers. The inability to bank credits prohibits seasonal gaming.]~~

~~(3) When the eligible net metering customer elects to no longer participate in the net metering tariff, any unused credit shall revert to the utility.~~

#### 170 IAC X-8 Liability and Indemnity

Sec 8. (a) Liability insurance: An eligible net metering customer operating a net metering facility shall maintain homeowners, commercial, or other insurance providing coverage in the amount of at least \$100,000 for the liability of the insured against loss arising out of the use of a net metering facility. Eligible net metering customers shall not be required to obtain liability insurance with limits higher than that which is stated in this section; nor shall such eligible net metering customers be required to purchase additional liability insurance where the eligible net metering customer's existing insurance policy provides coverage against loss arising out of the use of a net metering facility by virtue of not explicitly excluding coverage for such loss.

(b) Indemnity: ~~The utility and the eligible net metering customer shall indemnify and hold the other party utility harmless from and against all claims, liability, damages, and expenses, including attorney's fees, based on any injury to any person, including loss of life, or damage to any property, including loss of use thereof, arising out of, resulting from, or connected with, or that may be alleged to have arisen out of, resulted from, or connected with an act or omission by eligible net metering customer-such other party, its employees, agents, representatives, successors, or assigns in the construction, ownership, operation, or maintenance of-such party's eligible net metering customer's facilities used in net metering.~~ [Note: Because the customer is being permitted new access to connect and deliver energy from its eligible generating facility to the utility's system, it is appropriate for the customer to hold the utility harmless from any increased risk or damages associated with that special access. Accordingly, the indemnity provision should define the customer's responsibility for introducing a new risk to the utility and its other customers. The utility's responsibility for damaging customer owned equipment, which would include an eligible generating facility, is already well defined by the utility's terms and conditions of service and other applicable contract law and need not be defined or modified by these rules.]

#### 170 IAC X-9 Standard Offer and Reporting Requirements

Sec 9. (a) Within 60 days of the effective date of this rule, all electric utilities shall submit for approval under the commission's thirty (30) day filing process a standard net metering tariff. The standard net metering tariff shall comply with the requirements of this section.

(b) Within 60 days of the effective date of this rule, all electric utilities shall submit for approval via the commission's thirty (30) day filing process a standard interconnection agreement for net metering facilities. The standard interconnection agreement shall include:

- (1) Name of eligible net metering customer;
- (2) Location of proposed net metering facility;
- (3) Type of proposed net metering facility;
- (4) Size and/or inverter power rating of proposed net metering facility;
- (5) Inverter manufacturer and model number; and
- (6) A description of the electrical installation of the inverter and associated ~~electrical~~ equipment.

(c) Within sixty (60) days of the effective date of this rule, and on or before March 1st of each subsequent year, each electric utility shall file with the commission a Net Metering Report. The Net Metering Report shall contain the following items:

- (1) The total number of eligible net metering customers and facilities;
- (2) The number, size and type (solar, wind, hydro) of net metering facilities;
- (3) The number of new eligible net metering customers interconnected during the previous calendar year;
- (4) The number of existing eligible net metering customers ~~that known to have~~ ceased participation in the net metering tariff during the previous calendar year; and
- (5) If available, data on the amount of electricity generated by net metering facilities.

#### 170 IAC X-10 Customer complaints

Sec. 10. In the event an electric utility and an eligible net metering customer are unable to agree on matters relating to net metering, either party may raise a customer complaint to the commission in accordance with 170 IAC 4-1-17.